

Serial No.: 10/628,318

Docket No.: GMC 0047 PA/40320.52

Remarks

Claims 1-45 are pending. Claims 1-10, 12, 14-15, 18-20, 23-25, 31-41 are rejected. The examiner indicated claims 11, 13, 16-17, 21-22, 26-30 and 42-43 indicated these claims would be allowable if rewritten in independent form. Claims 1, 3, 5, 6, 8, 10-13, 15, 16, 18, 21, and 28-30 have been amended herein, for clarification. Claims 44 and 45 have been added. No new matter has been entered.

Claims 1-10, 12, 14-15, 18-20, 31, 33, and 38-39 were rejected under 35 U.S.C. 102(b) as being anticipated by Isono et al (US 6,365,293). Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isono et al in view of Fuglevand et al (US 6,939,636). Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isono et al in view of Wood, III et al (US 6,350,539). Claims 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isono et al in view of Johnson et al (US 5,840,438). Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isono et al in view of Mussell et al (US 5,620,807). These rejections are respectfully traversed.

Independent claims 1 and 33 are amended herein, without admission, to incorporate the claim elements of objected claim 21, which was indicated allowable by the examiner. Both amended claims recite a hydrophilic carbonaceous component comprising a moderate surface area carbon characterized by mean particle size of between about 15 nm and about 70 nm in the high H₂O regions of the mesoporous layer. As the examiner states in the office action, the prior art fails to teach these mean particle sizes; therefore, the applicant asserts that claims 1-41 are in condition for allowance.

Similarly, the new claims 44 and 45 incorporate the claim elements of objected claim 28, which was indicated allowable by the examiner. As the examiner concedes, none of the references teach or suggest a mesoporous layer at least partially infiltrating at least one the first and second diffusion media substrates; therefore, the applicant asserts that claims 1-41 are in condition for allowance.

Regarding claims 42 and 43, applicant respectfully points out that the objection was in error. Claim 42 is an independent claim, which recites a mesoporous layer comprising a region of increased porosity relative to a remaining portion of the mesoporous layer. The examiner stated that this claim element was not taught by the prior art, thus independent claim 42, and its dependent claim 43 are in condition for allowance.

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The Applicants respectfully submit that the application is in condition for allowance. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully requested.

Respectfully submitted,

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